REMARKS

Applicant's undersigned attorney thanks the Examiner for her comments. Applicant respectfully requests reconsideration of this patent application, particularly in view of the above Amendment and the following remarks. Currently, Claims 1-39 are pending.

Amendments to the Claims

Claims 1-39 have been examined with no claims being allowed. Applicant has amended Claims 1, 16, 21, and 24. No new matter has been added by this Amendment.

Claim 1 has been amended to include the limitation of the thermally retracted material being a single-layer material. Support for this amendment is provided at page 7, lines 3-4, of the specification.

Claim 16 has been amended to include the limitation of the two thermally retracted materials being *thermally* bonded to one another. Support for this amendment is provided at page 8, lines 9-10, and at page 12, lines 10-12, of the specification.

Claim 21 has been amended to remove a superfluous comma.

Claim 24 has been amended to include the limitation of the fibrous, retractable web being "a single-layer or thermally-bonded multilayer" web. Support for this amendment is provided at page 7, lines 3-4, and at page 8, lines 7-12.

No additional fee is due for this Amendment because the number of independent claims remains unchanged and the total number of claims remains unchanged.

Claim Rejections - 35 U.S.C. §102

The rejection of Claims 1-6, 10-25, and 36-39 under 35 U.S.C. §102(b) as being anticipated by Makihara (Japanese Patent Publication No. 11-061624) is respectfully traversed.

Makihara discloses a two-layer loop material. The material is obtained by laminating two layers together through hydroentanglement. The two-layer

hydroentangled laminate is then thermally treated to shrink one of the layers, thereby forming projections in the other layer.

For a reference to anticipate a claim, the reference must disclose each and every element or limitation of the claim. Makihara does not disclose each and every element or limitation of Claims 1, 16, or 24.

Applicant's invention as recited in independent Claim 1 requires that the loop component include a single layer of a thermally retracted material having a plurality of looped fibers on one side and a thermally retracted fibrous surface on the other side. In contrast, Makihara discloses a two-layer thermally retracted material having looped fibers on one side of one layer and an opposite side of the same layer hydroentangled with a surface of a second layer. The second layer has a surface, opposite the hydroentangled surface, that is thermally retracted. Thus, Makihara fails to disclose a single layer thermally retracted material having looped fibers on one side and a thermally retracted fibrous surface on the other side.

Applicant's invention as recited in independent Claim 16 requires that two layers of thermally retracted material be thermally bonded to one another. In contrast, the two layers in the laminate of Makihara are laminated through hydroentanglement. As explained on page 12, lines 9-14, of the subject application, the loop component is formed without the use of adhesives or any other type of bonding mechanism other than heat. Thus, the loop component of the invention is formed in a highly efficient, highly economical manner. Makihara fails to disclose two layers thermally bonded to one another.

Applicant's invention as recited in independent Claim 24 requires the steps of applying heat to a second side of a single layer or a thermally-bonded multilayer material and allowing the first side of the material to gather into loops. In contrast, Makihara discloses a method of forming a loop material in which heat is applied to a first layer of material, and projections are formed on a second layer of material laminated to the first layer of material through hydroentanglement. Thus, Makihara fails to disclose the step of applying heat to one side of a single layer or a thermally-bonded multilayer material and allowing the opposite side of the same material to gather into loops.

For at least the reasons presented above, Applicant respectfully submits that Claims 1, 16, and 24 are not anticipated by Makihara. Because Claims 2-6 and 10-15 depend from Claim 1, Claims 17-23 depend from Claim 16, and Claims 25 and 36-39 depend from Claim 24, these claims are also not anticipated by Makihara. Thus, Applicant respectfully requests withdrawal of this rejection.

Claim Rejections - 35 U.S.C. §102/103

The rejection of Claims 9 and 35 under 35 U.S.C. §102(b) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as being obvious over the cited Makihara reference is respectfully traversed.

As pointed out by the Examiner, Makihara discloses that it is desirable for the shrinkage to occur in the machine direction, while ***minimizing*** the shrinkage in the cross direction. The Examiner contends that Makihara thereby implies that at least some shrinkage occurs in the cross direction. However, by suggesting that shrinkage in the cross direction is desirably minimized, Makihara teaches away from Applicant's Claims 9 and 35 which are directed to retraction in the cross direction.

Furthermore, as explained above, Makihara fails to disclose or suggest a single layer thermally retracted material having looped fibers on one side and a thermally retracted fibrous surface on the other side, and further fails to disclose or suggest applying heat to one side of a single layer or thermally-bonded multilayer material and allowing the opposite side of the same material to gather into loops. Because the loop material of Makihara requires two layers laminated through hydroentanglement, it is unlikely that a person skilled in the art would even consider using a single-layer or a thermally-bonded multilayer, thermally retracted loop material, much less, a single-layer or thermally-bonded multilayer, thermally retracted loop material that is retracted in a cross direction, based on Makihara.

For at least the reasons given above, Applicant respectfully submits that the teachings of Makihara fail to disclose or suggest Applicant's claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Claim Rejections - 35 U.S.C. §103

A. Makihara in view of McCormack et al.

The rejection of Claims 7 and 8 under 35 U.S.C. §103(a) as being unpatentable over Makihara in view of McCormack et al. (U.S. Patent No. 5,997,981) is respectfully traversed, particularly in view of the above Amendment and the following remarks.

As explained above, Makihara fails to disclose or suggest a single layer thermally retracted material having looped fibers on one side and a thermally retracted fibrous surface on the other side. Makihara further fails to disclose or suggest that the single layer of material is a nonwoven material having a pre-existing inter-fiber bond pattern. One advantage of the S-weave bond pattern, recited in Applicant's Claims 7 and 8, is to better define the spacing and dimensions of the loops, which tend to appear between the bonded regions (Page 11, lines 9-15).

The Examiner suggests that it would have been obvious to one of ordinary skill in the art to modify the Makihara laminate by employing dual layer spunbond fabric having an S-weave bond pattern, rather than a hydroentangled dual layer nonwoven, motivated by the inherent advantages of spunbond fabrics, such as low cost and high strength. However, McCormack et al. disclose a laminate of a film layer and a prebonded nonwoven layer. Thus, it is unlikely that a person skilled in the art would be motivated by McCormack et al., which disclose a film layer bonded to a nonwoven layer, to replace the two hydroentangled layers of Makihara with two prebonded nonwoven layers. Furthermore, even if the invention of Makihara were modified to include a dual layer spunbond fabric, as suggested by the Examiner, the resulting loop material would not be within the scope of Claims 7 and 8 of Applicant's invention. More particularly, Claims 7 and 8 require a single-layer thermally retracted material, whereas Makihara and McCormack et al. disclose dual layer materials.

For at least the reasons given above, Applicant respectfully submits that the teachings of Makihara in view of McCormack et al. fail to disclose or suggest Applicant's claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

B. Makihara in view of Marmon et al.

The rejection of Claims 26-32 under 35 U.S.C. §103(a) as being unpatentable over Makihara in view of Marmon et al. (U.S. Patent No. 6,066,221) is respectfully traversed, particularly in view of the above Amendment and the following remarks.

As explained above, Makihara fails to disclose or suggest applying heat to one side of a single layer or thermally-bonded multilayer material and allowing the opposite side of the same material to gather into loops. Makihara further fails to disclose or suggest the use of a hot air knife for heating a single layer or thermally-bonded multilayer material.

Marmon et al. disclose a hot air knife assembly, as well as a method of producing spunbonded fabrics that are not significantly compacted or prebonded. Marmon et al. fail to disclose or suggest the use of a hot air knife for thermally retracting materials. There is no suggestion to combine the teachings of Marmon et al. with the invention of Makihara, and even if the two references were combined, it would not be obvious to a person skilled in the art to use a hot air knife to thermally retract a single layer or thermally-bonded multilayer material. Thus, the teachings of Marmon et al. fail to overcome the deficiencies of Makihara.

For at least the reasons given above, Applicant respectfully submits that the teachings of Makihara in view of Marmon et al. fail to disclose or suggest Applicant's claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

C. Makihara and Marmon et al. in further view of Arnold et al.

The rejection of Claims 33 and 34 under 35 U.S.C. §103(a) as being unpatentable over Makihara and Marmon et al. in further view of Arnold et al. (U.S. Patent No. 5,707,468) is respectfully traversed, particularly in view of the above Amendment and the following remarks.

As explained above, Makihara in combination with Marmon et al. fails to disclose or suggest applying heat (particularly from a hot air knife) to one side of a single layer of material and allowing the opposite side of the same layer to gather into loops.

Arnold et al. disclose the use of a hot air knife to provide integrity to a nonwoven web. However, Arnold et al. fail to disclose or suggest the use of a hot air knife to thermally retract a single-layer or thermally-bonded multilayer nonwoven material. Furthermore, Arnold et al. fail to disclose or suggest thermal retraction of any type of material. Instead, the hot air knife in Arnold et al. is heated to a temperature insufficient to melt the polymer in the fiber but sufficient to soften it slightly (Col. 5, lines 25-27).

There is no suggestion to combine the teachings of either Marmon et al. or Arnold et al. with the invention of Makihara. Neither Marmon et al. nor Arnold et al. disclose or suggest the use of a hot air knife for thermally retracting a material. Therefore, even if the teachings of Marmon et al. and Arnold et al. were combined with the invention of Makihara, it would not be obvious to a person skilled in the art to use a hot air knife to thermally retract a single layer or thermally-bonded multilayer material, either with or without the use of a forming wire and a vacuum.

For at least the reasons given above, Applicant respectfully submits that the teachings of Makihara and Marmon et al. in further view of Arnold et al. fail to disclose or suggest Applicant's claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Notice of References Cited

Applicant notes that the Marmon et al. reference (U.S. Patent No. 6,066,221) does not appear on the Notice of References Cited. This reference has not previously been cited in an Information Disclosure Statement by Applicant, but has been cited in the Office Action in response to which this Amendment is directed. To ensure that this reference will be cited on the face of any U.S. Patent issuing from the subject application, Applicant requests that this reference be cited in a Supplemental Notice of References Cited.

Conclusion

Applicant intends to be fully responsive to the outstanding Office Action. If the Examiner detects any issue which the Examiner believes Applicant has not addressed in this response, Applicant's undersigned attorney requests a telephone interview with the Examiner.

Applicant sincerely believes that this Patent Application is now in condition for allowance and, thus, respectfully requests early allowance.

Respectfully submitted,

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